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(71) Applicant (for all designated States except US): S.I.P.A.
SOCIETA' INDUSTRIALIZZAZIONE PROGET-
TAZIONE AUTOMAZIONE S.P.A. [IT/IT]; Via Caduti
del Lavoro, 3, I-31029 Vittorio Veneto (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ZOPPAS, Matteo
[IT/IT]; Via S. Pellico, 46, I-33074 Fontanafredda (IT).
ARMELLIN, Alberto [IT/IT]; Via Soffratta, 9, I-31029
Vittorio Veneto (IT). SARAN Andrea [IT/IT]; Borgo S.

Antonio, 33/A, I-31010 Tarzo (IT). VENDRAMELLI, Ot-
torino [IT/IT]; Via Madonetta, 8, I-31027 Spresiano Lo-
vadina (IT).

(74) Agent: GERVASI, Gemma; Notarbartolo & Gervasi
S.p.A., Corso di Porta Vittoria, 9, I-20122 Milan (IT).

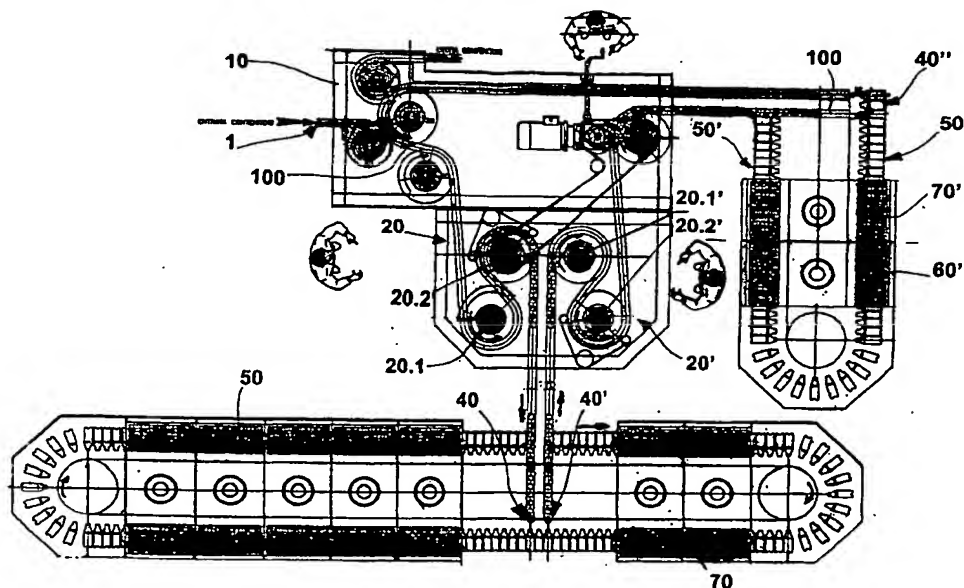
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(54) Title: COATING PROCESS AND COATING PLANT FOR CONTAINERS



(57) Abstract: A process and relating plant for applying protective coats of paint to containers, especially plastic bottles. The process involves gripping the bottles by means of rotating gripping devices fastened to a conveyor chain, and conveying said bottles to all the different stations involved in the process: coating, drying, and curing. Centrifugation is used to remove any excess coating from the external surface of the bottles, keeping the bottles fastened to the same conveyor chain.

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 936 147 A (SAINT GOBAIN) 4 September 1963 (1963-09-04) the whole document	1
A	US 5 658 619 A (PUSKARZ STANLEY J ET AL) 19 August 1997 (1997-08-19) cited in the application the whole document	1
A	GB 874 743 A (METAL BOX CO LTD) 10 August 1961 (1961-08-10) the whole document	1
A	FR 1 137 099 A (JUHASZ ZOLTAN) 23 May 1957 (1957-05-23) the whole document	1
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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2230 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Brothier, J-A

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 543 277 A (GILES BRIAN) 24 September 1985 (1985-09-24) the whole document ---	1
A	US 3 734 765 A (RUSSELL R ET AL) 22 May 1973 (1973-05-22) the whole document ---	1
A	WO 99 65613 A (CAREW DAVID LEE ;AMCOR PACKAGING AU PTY LTD (AU)) 23 December 1999 (1999-12-23) the whole document -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/10039

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 936147	A	04-09-1963	DE 1234361 B	16-02-1967
US 5658619	A	19-08-1997	NONE	
GB 874743	A	10-08-1961	NONE	
FR 1137099	A	23-05-1957	NONE	
US 4543277	A	24-09-1985	GB 2134012 A	08-08-1984
US 3734765	A	22-05-1973	NONE	
WO 9965613	A	23-12-1999	AU 760768 B2	22-05-2003
			AU 4590199 A	05-01-2000
			WO 9965613 A1	23-12-1999
			CA 2334714 A1	23-12-1999
			NZ 508784 A	25-07-2003